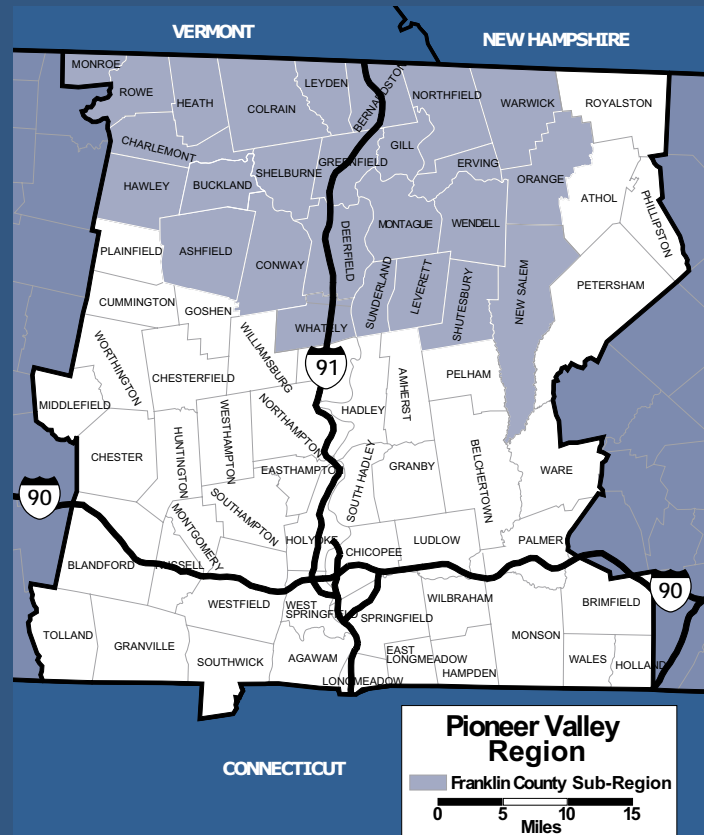
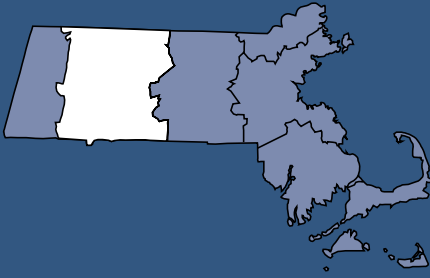


pioneer valley region



The Pioneer Valley – defined by the Connecticut River valley – runs north-to-south from Canada, then along the Vermont-New Hampshire border, through three western Massachusetts counties stacked north to south: Franklin, Hampshire, and Hampden,¹ then to the sea through central Connecticut. The Valley is in many ways a cohesive economic unit, with a long history of precision metalworking and expertise in insurance. These industries still form the backbone of the Valley's export base.

In Massachusetts, the Springfield metropolitan area is the economic center of the Pioneer Valley Region. The city sits at the crossroads of the Massachusetts Turnpike, which runs east-to-west, and Interstate 91, which runs north-to-south down the Valley from Canada to the sea. The Region's economy still flows primarily north and south. It has relatively few business-to-business dealings even with its immediate neighbors to the east and west.

Springfield itself is located along the Connecticut border, close to Hartford and the large complex of economic activity to the south. Springfield's numerous small machine shops supply large, high-tech manufacturing firms located throughout the Valley that make jet engines, aerospace components, military equipment, and other high-value products. The Massachusetts Mutual Life Insurance Company (MassMutual), headquartered in Springfield, is part of an insurance cluster that includes well-known carriers located in Hartford. These industries serve national and international markets using a well-developed road and rail transportation network and Bradley International Airport in northern

Connecticut. Along with its many colleges, its university and two significant medical centers, the Region boasts one of the largest retail malls and the biggest amusement park in New England. With a mix of city, small town, and rural communities and a low cost of living, the Pioneer Valley also provides an attractive quality-of-life to its residents.

The 1990s was a difficult decade, however, as the Pioneer Valley found itself in the midst of a long-term economic transition. The Region was hit hard by: 1) the recession of the early 1990s; 2) the defense industry restructuring that followed the end of the Cold War; and 3) a prolonged slump in the insurance industry. Many of its manufacturing and financial services industries actually have good prospects for growth in national and global markets in the 21st century. The task at hand is both to diversify the Region's export base away from its traditional industrial-revolution roots and to re-orient its traditional clusters toward a more competitive structure that can thrive in the new century.

There are signs that this re-orientation is already underway. While employment remains below levels seen at the end of the 1980s, the job count has increased steadily since the middle of the decade. We find supporting evidence among "old-line" manufac-

¹ The Pioneer Valley Region also includes four towns in northwest Worcester County: Athol, Petersham, Philipston, and Royalston.

² *New England's Knowledge Corridor: The Making of an InterState Region*. Connecticut Center for Economic Analysis, Connecticut Economic Resource Center, and the UMass Donahue Institute, 2002.

turing industries – often viewed euphemistically as “mature” – of a transformation toward a high-tech ways of doing business. Recent research conducted for the Hartford-Springfield Economic Partnership demonstrates that a four county region, including Hampden and Hampshire counties, has become one of the most productive in the nation.² This suggests that Pioneer Valley firms, across a broad spectrum of industries, are replacing traditional approaches with better, often high-tech ways of doing business.

Sub-Regional Analysis

The Pioneer Valley stretches from the City of Springfield in Hampden County³ through the more rural Hampshire County,⁴ and into Franklin County,⁵ which is rural, hilly, and more agricultural, but with a significant manufacturing base. This report defines Franklin County as a sub-region for detailed analysis.

Because of the way economic information is collected and recorded, detailed data at the sub-region level is often only available for Franklin County. When available, this data will be presented in the charts and figures that follow.

Economic Overview

Employment

Employment in the Pioneer Valley Region posted its highest-ever level – just under 335,000 workers – at the peak⁶ of the previous expansion in 1989 (Figure 10-2). Not surprisingly, the regional unemployment rate was also quite low at 3.9 percent, one-tenth of a point better than the statewide rate. But economic conditions then deteriorated rapidly. Employment fell more than 7 percent, to 310,050 by 1992, and joblessness hit 9.5 percent. Employment in the Commonwealth fell by 200,000 between 1989 and 1991, a 6.4 percent decline, and unemployment peaked at 9.1 percent (Figure 10-3).

The Region’s unemployment rate fell steadily, to 3 percent in the year 2000. The Commonwealth’s jobless rate that year reached 2.6 percent. While falling unemployment was certainly good news, the major factor was not a rise in employment but out-migration and a decline in the Region’s workforce – an ongoing

³ Hampden County comprises: Agawam, Blandford, Brimfield, Chester, Chicopee, East Longmeadow, Granville, Hampden, Holland, Holyoke, Longmeadow, Ludlow, Monson, Montgomery, Palmer, Russell, Southwick, Springfield, Tolland, Wales, West Springfield, Westfield, and Wilbraham.

⁴ Hampshire County comprises: Amherst, Belchertown, Chesterfield, Cummington, Easthampton, Goshen, Granby, Hadley, Hatfield, Huntington, Middlefield, Northampton, Pelham, Plainfield, South Hadley, Southampton, Ware, Westhampton, Williamsburg, and Worthington.

⁵ Franklin County comprises: Ashfield, Bernardston, Buckland, Charlemont, Colrain, Conway, Deerfield, Erving, Gill, Greenfield, Hawley, Heath, Leverett, Leyden, Monroe, Montague, New Salem, Northfield, Orange, Rowe, Shelburne, Shutesbury, Sunderland, Warwick, Wendell, and Whately.

⁶ The data in this section on the number of people employed, in the labor force, and unemployed are taken from the household survey. They therefore will not match the employer-based data used in other sections that report the number of payroll jobs.

figure 10-1

Pioneer Valley Employment by Major Industry and County, 1999

	Franklin County		Hampshire County		Hampden County	
	Employment	% of Total	Employment	% of Total	Employment	% of Total
Agriculture	478	1.8	798	1.4	1,388	0.7
Construction	816	3.0	1,822	3.3	6,794	3.4
Manufacturing	5,974	22.2	5,068	9.2	33,006	16.5
Transportation and Public Utilities	994	3.7	1,219	2.2	8,794	4.4
Trade	5,621	20.9	14,646	26.6	47,160	23.6
Finance, Insurance, and Real Estate	819	3.0	1,597	2.9	11,408	5.7
Services	7,293	27.1	17,214	31.2	59,584	29.8
Government	4,661	17.3	12,515	22.7	31,603	15.8
Total Employment	26,907	100.0	55,134	100.0	199,932	100.0

Source: MA Division of Employment and Training ES-202

figure 10-2

Pioneer Valley Region Labor Force and Employment

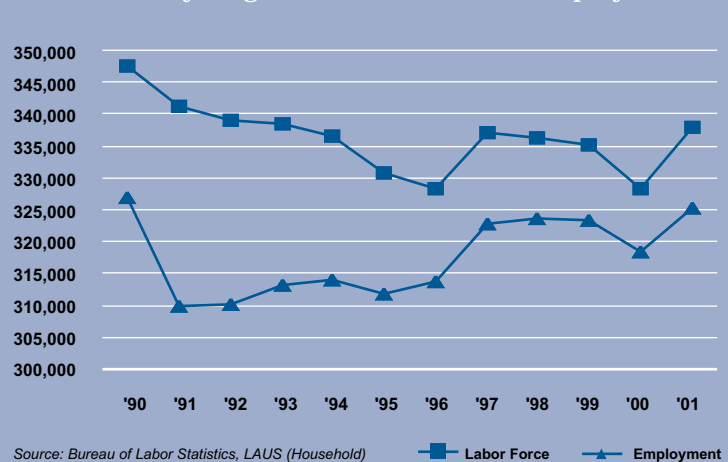


figure 10-3

Pioneer Valley Region Unemployment Rate

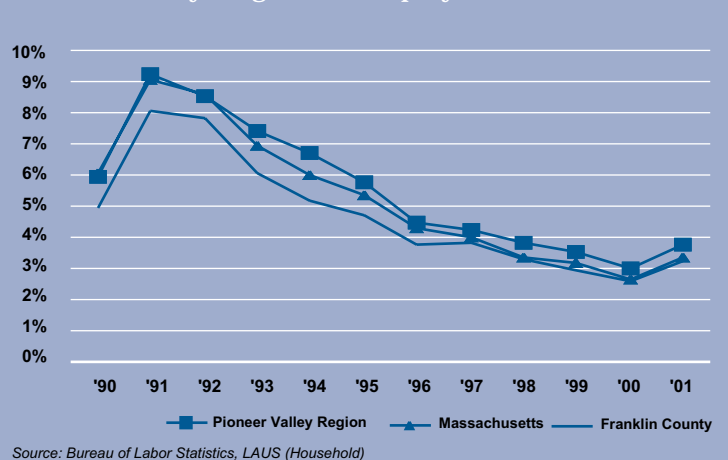
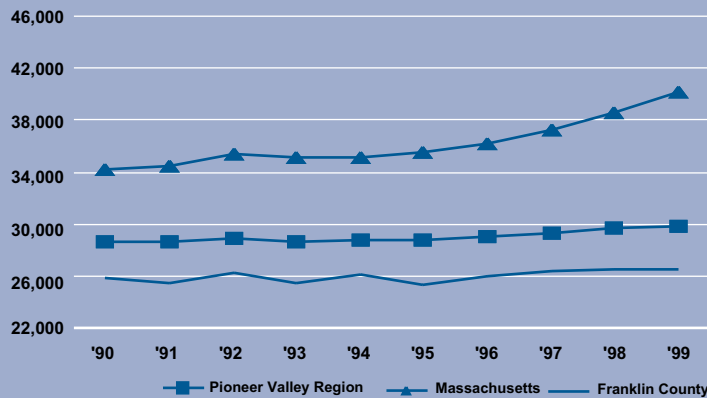


figure 10-4

Pioneer Valley Region Average Real Wages



Source: MA Division of Employment and Training, ES-202

phenomenon in the Pioneer Valley through much of the decade. Employment has grown steadily since 1992, and is now approaching levels seen in the late 1980s. There has been virtually no growth in the Region's labor force, however, and its level was slightly less in 2001 than in 1992 (see figure 10-2 on previous page).

Income

Average real wages⁷ in the Pioneer Valley grew modestly during the 1990s, rising over the decade from \$28,600 to \$29,800 (2000 dollars). In Franklin County, real wages virtually stagnated. They averaged \$25,861 in 1990 and \$26,500 in 2000. By contrast, average real wages in the Commonwealth went from \$34,200 to \$40,100 over the decade⁸ (see figure 10-4). The Region's modest growth in pay, relative to the rest of the State, is seen in all sectors of the economy other than government (see figure 10-5).

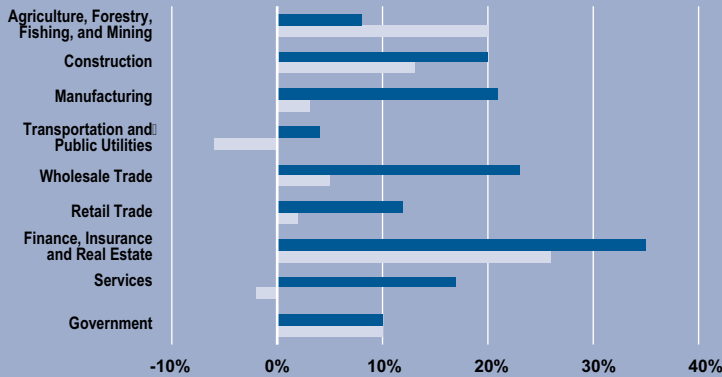
Employment⁹ by Major Industry Sector

At the major-industry level of detail, the Pioneer Valley's economy in the year 2000 closely resembles that of the State: Services is the largest sector, at 40 percent of total employment; Wholesale and retail trade account for about 24 percent of total employment. In fact, these three divisions account for nearly two out of three jobs in the Region. Manufacturing, which in so many ways defines the heritage of the Pioneer Valley, represents 16 percent of all employment. Overall, employment growth over the expansion running from 1993 to 2000 exceeded 15 percent; the number of manufacturing jobs, by contrast, grew less than 1 percent (see figure 10-6).

A notable change in industry mix is the growing prominence of manufacturing employment in Franklin County. While the fraction of manufacturing jobs in the Region as a whole declined over the past decade, in Franklin County the division's share of employment went from 23 percent in 1993 to 25 percent in 2000. While mills and farms are commonly seen as mutually exclusive, the proportion of agricultural employment in the County, albeit small, is double what it is in the rest of the Region (2 percent of employment in Franklin County versus 1 percent in the Pioneer Valley Region as a whole). In addition, Franklin County has seen notable growth in knowledge-sector industries, especially information technology, financial services, and knowledge creation (see figure 10-7).

figure 10-5

Change in Real Average Pay by Major Industry, Pioneer Valley Region: 1993 to 2000



Source: MA Division of Employment and Training

figure 10-6

Pioneer Valley Region Employment by Major Industry

	1993	2000	Percent of 2000 Total
Agriculture, Forestry, Fishing, and Mining	1,996	2,787	0.9
Construction	9,150	11,937	4.0
Manufacturing	46,841	47,092	15.8
Transportation and Public Utilities	14,857	17,606	5.9
Wholesale Trade	9,740	12,234	4.1
Retail Trade	50,870	58,093	19.5
Finance, Insurance, and Real Estate	15,235	14,560	4.9
Services	98,055	120,545	40.4
Government	11,638	13,636	4.6
Total	258,382	298,490	100.0

Source: Division of Employment and Training, ES-202

⁷ The U.S. consumer price index (CPI) was used to adjust nominal wages for the effects of inflation.

⁸ The Greater Boston area, where the cost of living is considerably higher than in the Pioneer Valley, dominates these Statewide data. Any wage or income comparisons made between the Region and the State must be made with the cost-of-living differential in mind.

⁹ Employment is measured here using the Bureau of Labor Statistics, ES-202 series, which are employer reports of payroll jobs rather than household-based measures of employed or unemployed people. As a result, the numbers will differ from employment figures based on the household survey presented in other sections of the document.

The Pioneer Valley Region Export Sector

As explained in Chapter 2, a healthy export sector is critical to a Region's economic success. The sidebar in that Chapter on "The Massachusetts Export Sector" presented six large industry clusters as the key components of the Commonwealth's export sector. These clusters were identified in earlier State policy documents and studies, specifically *Choosing to Compete*¹⁰ and the more recent *Knowledge Sector Powerhouse*.¹¹ They include four knowledge-based clusters – Information Technology, Health Care, Financial Services, and Knowledge Creation. They also include two clusters that are less knowledge intensive: Travel and Tourism and "Traditional Manufacturing" (manufacturing industries, such as paper, plastics and rubber, metalworking, and machinery, which are not part of the Information Technology or Health Care clusters). The discussion below uses this framework to explore the Pioneer Valley Region's export sector.

Figure 10-8 shows export cluster growth in the Region and sub-region, as compared to Massachusetts. When interpreting the results of our analysis, please note that the employment figures reported for these large industry clusters are not meant to represent export sector jobs. The Health Care cluster, for example, includes physicians serving the local population. A finer picture of the composition of the Region's export sector, and the extent to which it has become part of the wider knowledge-based economy, is developed in the discussions that follow. Also, note that some of the following charts show no data for some industries in the export clusters. This does not necessarily mean that the industry is absent in the Region. Federal rules prohibit access to data that could provide information about individual firms. The lack of industry data could be due to this limitation.

With the exception of Health Care, employment in the export clusters has grown more rapidly in Franklin County than in the Pioneer Valley Region overall. This should place the sub-region in a relatively strong position to take advantage of the next economic expansion.

Information Technology

In the fast-growing Information Technology cluster, employment expanded briskly in software and services and fell sharply in the electronic and electrical equipment manufacturing sector¹² (see figure 10-9).

¹⁰ Massachusetts Executive Office of Economic Affairs and the University of Massachusetts, (Boston, 1993).

¹¹ Robert Forrant, Philip Moss, and Chris Tilly, (Boston: UMass Donahue Institute, 2001).

¹² The Massachusetts Division of Employment and Training suppressed data for the Communications Hardware Manufacturing sub-sector to preserve employer confidentiality.

figure 10-7

Change in Employment, by Major Industry, Pioneer Valley Region: 1993 to 2000

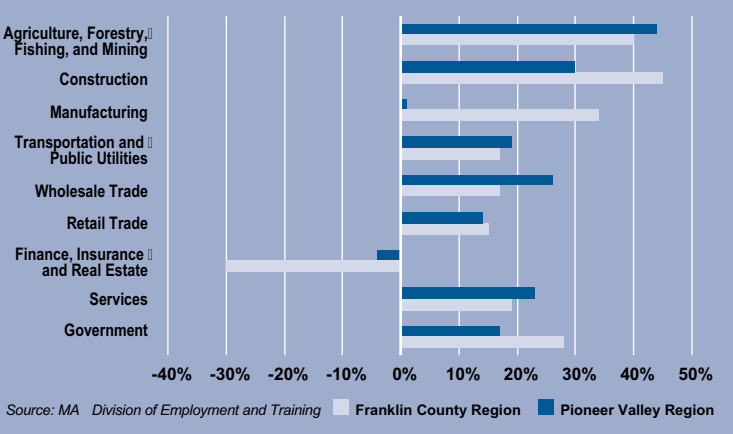


figure 10-8

Employment Change in the Commonwealth's Export Clusters: The Pioneer Valley Region, 1993 to 2000

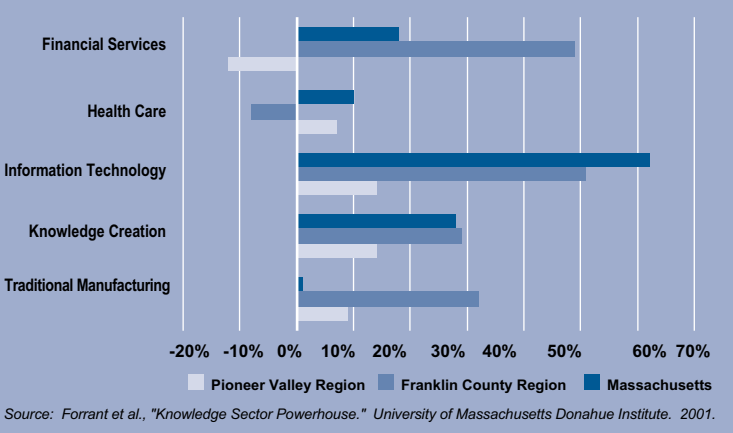


figure 10-9

Information Technology: Change in Employment, Pioneer Valley Region: 1993 to 2000

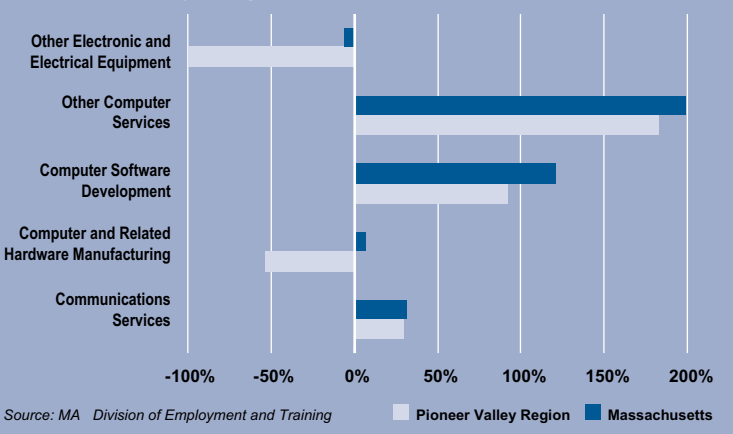
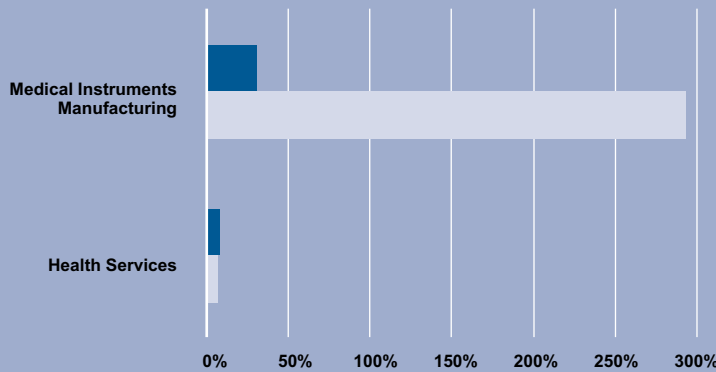


figure 10-10

Health Care: Change in Employment, Pioneer Valley Region: 1993 to 2000



Source: MA Division of Employment and Training

Pioneer Valley Region Massachusetts

Health Care

Employment in medical instruments manufacturing nearly tripled, albeit from a small employment base, during the 1993 - 2000 expansion. No other component in this cluster experienced any significant growth during the period¹³ (see figure 10-10).

Knowledge Creation

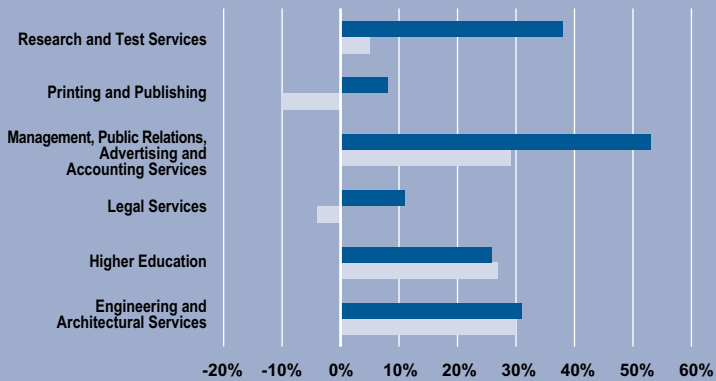
Three components of this cluster have grown at about the same brisk pace since 1993: management, public relations, advertising, and accounting services; higher education; and engineering and architectural services. Only higher education, however, matched the gains registered by the Commonwealth overall. Printing, publishing, and legal services firms shed employees during this same period (see figure 10-11).

Financial Services

The employment decline in this cluster masks a significant shift in the industry mix in regional financial services. While both insurance carriers and banking and savings institutions lost employment since 1993, the number of jobs in securities and exchange services increased by nearly 70 percent (Figure 10-12).

figure 10-11

Knowledge Creation: Change in Employment, Pioneer Valley Region: 1993 to 2000



Source: MA Division of Employment and Training

Pioneer Valley Region Massachusetts

Traditional Manufacturing

Employment in plastics and paper manufacturing, and especially in machinery, advanced during the expansion following 1993. But employment in metalworking, long a staple of Pioneer Valley manufacturing, declined along with employment in apparel and textiles¹⁴ (see figure 10-13 on opposite page).

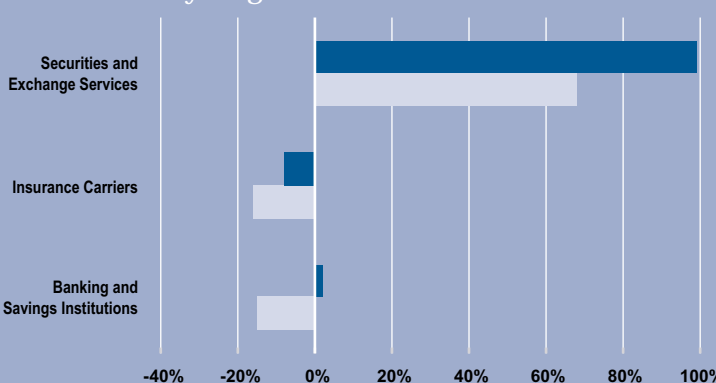
Travel and Tourism

The growing impact of the Travel and Tourism cluster in the Pioneer Valley Region can be seen in the experience of its hotel industry. In the year ending June 2000, hotels and motels in Hampden, Hampshire, and Franklin Counties grossed an estimated \$64.7 million in room sales, up 33 percent over the year ending June 1997.¹⁵ These expenditures define a conservative estimate of traveler spending in the Region. This is because total spending typically includes meals, retail purchases, and attractions, in addition to spending on accommodations.

In 2000, the Pioneer Valley hosted 72 hotels that, on average, employed 26 workers. Pay in the industry is low and frequently offers mostly part-time jobs. Average real wages increased and reached \$15,810 during that year.

figure 10-12

Financial Services: Change in Employment, Pioneer Valley Region: 1993 to 2000



Source: MA Division of Employment and Training

Pioneer Valley Region Massachusetts

¹³ The Massachusetts Division of Employment and Training suppressed data for the drugs and pharmaceuticals sub-sector to preserve employer confidentiality.

¹⁴ The Massachusetts Division of Employment and Training suppressed 1993 data for the Instruments sub-sector to preserve employer confidentiality.

¹⁵ Estimate based on FY 2000 State room occupancy tax collections, which are levied at 5.7 percent of the room rate.

Demographics

Population

In the ten years between the last two decennial censuses, the Pioneer Valley Region saw its population grow 1 percent. During the same period, the number of people in the Commonwealth increased by more than 5 percent (see figure 10-14).

Resident Age Distribution

The Pioneer Valley has seen a noteworthy shift in its age distribution over the past ten years. Most significant has been the drop in both the proportion and the number of individuals between 25 and 44 years old (see figure 10-14). The decline in numbers is due in part to out-migration, as the Region has historically experienced significant out-migration in this age group. Aging has also reduced the proportion of individuals between 25 and 44: the Pioneer Valley saw an increase of more than 30,000 individuals in the group between 45 and 64 years old. The median age of the population also increased from 33.1 to 36.2 years.

The Region’s population has remained predominantly White, though there have been some dramatic changes at the margins. Although the White population actually fell 4.3 percent in the ten years between censuses, in 2000 it still accounted for over 85 percent of the population. The small increase in the overall population was due to a growing number of Black residents and Asians. The Black population increased by 8.7 percent, while the Asian population jumped by approximately one third. It should be noted that Asians represent only a small portion of the Region’s population and despite their rapid growth during the 1990s, the Asian population remains small in absolute terms (see figure 10-14).

Perhaps the most dramatic demographic change in the 1990s was the growth of the Hispanic population. Those identifying themselves as Hispanic went from 50,630 in 1990 to 76,090 in 2000, a gain of over 50 percent. “Hispanic” is a self-identified designation and such an increase might be due in part to heightened awareness rather than a growth in magnitude. Nevertheless, self-identified Hispanics now account for 11 percent of the people living in the Pioneer Valley.

Finally, Franklin County’s total population increased by more than 2 percent during the 1990s, double the rate of the Pioneer Valley as a whole. As of 2001, Franklin County accounted for more than 11 percent of the Region’s employment and workforce. While the last recession hit the county hard, job growth here started earlier and went on virtually uninterrupted throughout the 1990s.

figure 10-13

Traditional Manufacturing: Change in Employment, Pioneer Valley Region: 1993 to 2000

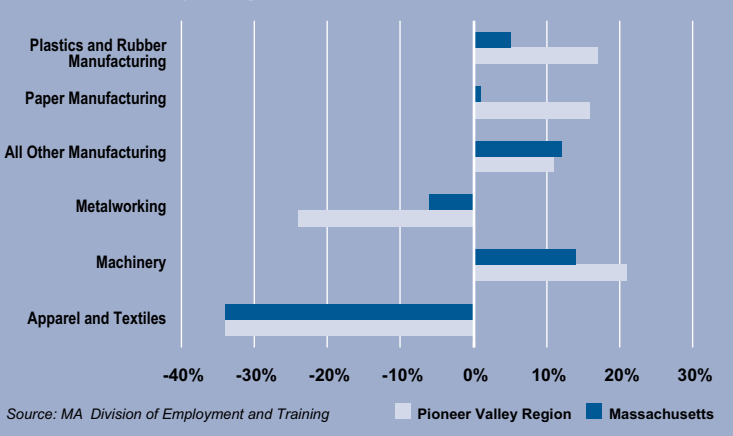


figure 10-14

Pioneer Valley Region Demographic Summary

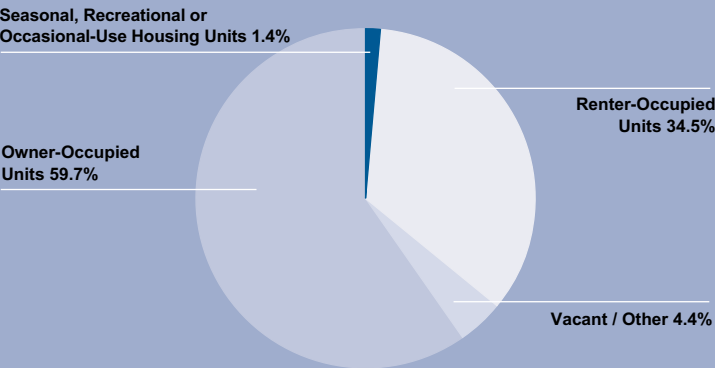
	Pioneer Valley Region			MA		
	1990	2000	Change	1990	2000	Change
Total population	688,184	695,368	1.0%	6,016,425	6,349,097	5.5%
Age (share of total)						
Under 18	23.8%	22.4%	0.6%	22.5%	23.6%	1.1%
19-24	13.2%	11.2%	-2.0%	11.8%	9.1%	-2.7%
25 to 44	31.3%	28.1%	-3.3%	33.6%	31.3%	-2.2%
45 to 64	17.6%	22.4%	4.8%	18.5%	22.4%	3.8%
65 and over	14.1%	14.0%	-0.1%	13.6%	13.5%	-0.1%
Race/Ethnicity (share of total)						
White	88.5%	83.8%	-4.7%	89.8%	84.5%	-5.3%
Black	5.4%	5.8%	0.4%	5.0%	5.4%	0.4%
Asian	1.3%	1.7%	0.4%	2.4%	3.8%	1.4%
Other race	4.8%	6.5%	1.7%	2.8%	4.0%	1.2%
Two or more races*	na	2.1%	na	na	2.3%	na
Hispanic (of any race)	7.4%	10.9%	3.6%	4.8%	6.8%	2.0%

* the category of persons with two or more races did not exist in the 1990 Census

Source: U.S. Bureau of the Census, Decennial Population Census

¹⁶ Data describing change in race/ethnic mix must be used with caution. For more information, see the Part II Introduction.

figure 10-15
Pioneer Valley Region Housing Supply



Source: U.S. Census Bureau, Census 2000

figure 10-16
Pioneer Valley Region Home Ownership

	1990	2000	Difference
Pioneer Valley Region	61.7%	59.7%	-1.9%
Massachusetts	59.5%	57.5%	-2.0%
% Over/Under State	2.2%	2.2%	0.0%

Source: U.S. Census Bureau, Census 2000

Housing

Home ownership and housing affordability are among the key social issues in any region. In the Pioneer Valley, 59.7 percent of all housing units are owner-occupied – a percentage slightly higher than the 57.5 percent rate for Commonwealth as a whole (see figures 10-15 and 10-16).

A causal factor in owner-occupancy is the cost of housing. In the year 2000, the average selling price for a home in the Pioneer Valley was \$106,000. This contrasts with the State’s average selling price of \$205,000. Although the regional figure represents an increase of 23 percent since 1996, the 2000 average selling price for the State is 48 percent higher than it was in 1996.

Regional Strengths and Competitive Advantages

The Region has many positive attributes that make it appealing to a broad range of inhabitants, and the characteristics that appeal to residents also appeal to businesses. An educated workforce, a well-developed transportation network, a high-tech telecommunications network, a broad range of educational opportunities, cultural breadth, relative affordability, and an overall small-town flavor all contribute to the valley’s appeal and, therefore, its economic potential.

Location. Just two hours from Boston and three hours from New York City, the Region serves as a centrally located and relatively low-cost alternative for firms. Workers, particularly those with young families, appreciate the benefits of living rurally while having the advantages of city life only a short distance away. The proximity of many institutions of higher education—from the University of Massachusetts to an impressive set of private institutions—enhances the cultural amenities of the region.

The Region is criss-crossed by two major interstate highways, I-91 running north and south, and the Massachusetts Turnpike going east and west. Traveling the interstate highway system puts most of the vast population of the northeastern United States within one days drive of the Pioneer Valley. Bradley International Airport, just south of the Massachusetts State boundary along I-91, is a dynamic and growing resource of airline transportation.

Travel and Tourism. Local officials are pushing a number of projects related to the tourism industry. These include a renovation of the Springfield Civic Center, a new convention center, and a \$103 million expansion of the Basketball Hall of Fame. Seasonally, the Region has unique natural attractions that draw tourists, including the fall foliage and the winter skiing season. It is also home to Yankee Candle and the Six Flags amusement park, which draw considerable tourist traffic to the Region.

Regional Economic Development. The Pioneer Valley has successfully organized collaborative regional economic development initiatives. The efforts encompass regional planning, marketing, business attraction and retention and industry-cluster development. These regional economic development partnerships have consistently involved private and public sector groups including local colleges and universities. While these collaborative economic development efforts can make markets work more efficiently – largely by providing information to key players and by seeking out and securing government subsidy for specific efforts – market forces will ultimately determine the economic future of the Region.

Challenges to Future Growth

The primary challenge to the Pioneer Valley is to diversify its economic base to provide multiple sources of future economic growth. The Region's manufacturing sector, while highly productive, cannot be the primary employment growth engine in the future. It remains to be seen what industry – or set of industries – will emerge to drive future economic development.

Regional Policy Priorities

Transportation. There are a number of urgent transportation infrastructure projects that remain unaddressed. Many of the Region's bridges, even those along the interstate system, need repair. Bradley International Airport also needs to be more fully integrated into the Region's transportation network.

Workforce training. Several barriers prevent the Region from taking advantage of current workforce training programs, including a lack of awareness and insufficient access to funding. The Region's past reliance on manufacturing employment, and the skills that support that employment, is not adequate for a high-technology industrial future. As its economic base diversifies, continually upgrading the skills of the workforce will become increasingly important.

Affordable housing. While housing costs have remained low when compared to other regions of the Commonwealth, home prices have been increasing significantly faster than wages. If this trend continues, one of the Region's key competitive advantages – its low cost of living – will erode.

Brownfield revitalization. One of the hidden constraints to economic development in the Region is the availability of land for industrial use. The Pioneer Valley has extensive brownfields that, if redeveloped, could help to alleviate this shortage. Redeveloping these contaminated land sites would also help preserve community character and improve the environment.

Linking the Region's Policy Priorities to Potential Solutions

Part III provides a variety of policy options that can help address the Region's economic development priorities. Figure 10-7 shows where to find relevant options.

figure 10-17

Policy Options for Regional Priorities

Policy Priority	Policy Options, Under Desired Outcomes in Part III
Transportation	See "Massachusetts is a leader in implementing development strategies that provide a high quality of life," pg. 128.
Workforce training	See "Our firms have access to the talent they need to succeed," pg.123. "Firms in our export industry clusters continually innovate to meet high value customer need effectively pg.119 See "Worker skills match the needs of business and the competitive environment," pg. 124.
Affordable housing	See "Massachusetts implements housing affordability solutions to growing businesses and their employees,"pg. 129.
Brownfields revitalization	See "Massachusetts is a leader in implementing development strategies that provide a high quality of life," pg. 128.